

### Abstract

The present invention includes a microplate for performing crystallography studies and methods for making and using such microplates. In particular, the microplate  
5 has a frame which includes a plurality of wells formed therein. Each well includes a first well and a second well. The first well includes a relatively small reservoir having a substantially concaved form capable of receiving a protein solution and a reagent solution. The second well  
10 includes a relatively large reservoir capable of receiving a reagent solution that has a higher concentration than the reagent solution within the first well, wherein the protein solution and the reagent solution within the first well interact with the reagent solution within the second well  
15 via a vapor diffusion process which enables the formation of protein crystals within the first well. The microplate may be sized so that it can be handled by a robotic handling system and/or a liquid handling system.